only those elements but may include other elements not expressly listed or inherent to such process, method, article, or apparatus. Also, as used herein, the terms "coupled," "coupling," or any other variation thereof, are intended to cover a physical connection, an electrical connection, a magnetic connection, an optical connection, a communicative connection, a functional connection, and/or any other connection. When language similar to "at least one of A, B, or C" or "at least one of A, B, and C" is used in the specification or claims, the phrase is intended to mean any of the following: (1) at least one of A; (2) at least one of B; (3) at least one of C; (4) at least one of A and at least one of B; (5) at least one of B and at least one of C; (6) at least one of A and at least one of C; or (7) at least one of A, at least one of B, and at least one of C.

What is claimed is:

1. A smart shoe system for monitoring patient activity, the smart shoe system comprising:

a shoe having a plurality of pressure sensors, each pressure sensor in the plurality of pressure sensors configured to detect pressure at a plurality of points in a sole of the shoe;

a microprocessor coupled to the plurality of pressure sensors;

a Global Positioning System ("GPS") integrated circuit for correlating position of the smart shoe system to activity data generated by the plurality of pressure sensors; and

a flash memory storage for storing data generated by the microprocessor and the plurality of pressure sensors, the microprocessor configured to execute an adaptive algorithm comprising:

initializing the adaptive algorithm;

creating a new file;

determining, based on a pressure data received from the plurality of pressure sensors, a transition from a sitting phase to a walking phase;

adapting a sampling rate for the plurality of pressure sensors, the adapting including augmenting a first sample rate for the plurality of pressure sensors to a second sample rate for the plurality of pressure sensors for the walking phase;

augmenting a first update rate for the GPS integrated circuit to a second update rate for the GPS integrated circuit for the walking phase;

collecting sensor data including storing the pressure data and a location data recorded during the sitting phase and the walking phase in the flash memory storage; and

determining if a test has reached a limit on iterations.

2. The smart shoe system of claim **1**, wherein the first sample rate and the second sample rate are within a range between 0.5 Hertz and 15 Hertz, the first sample rate being less than the second sample rate.

3. The smart shoe system of claim **1**, further comprising a battery coupled to the microprocessor, the GPS integrated circuit, and the plurality of pressure sensors.

4. The smart shoe system of claim **3**, further comprising a radio frequency transceiver for wireless communication between the smart shoe system and other electronic networking components, the microprocessor further configured to transmit, through the radio frequency transceiver, the pressure data and the location data.

5. A method for monitoring an activity level of a patient, the method comprising:

wearing, by the patient, a smart shoe system;

executing an adaptive algorithm to select a data sampling rate for a plurality of pressure sensors, the adaptive algorithm comprising (a) initialization, (b) creating a new file, (c) collecting sensor data, (d) adapting sampling from a first sample rate to a second sample rate, and (e) determining if a test has reached a limit on iterations;

recording, by the smart shoe system, activity information for the patient, the activity information including pressure data and location data, wherein:

the pressure data is recorded at the first sample rate during a sitting phase in response to the smart shoe system determining the patient is sitting,

the pressure data is recorded at the second sample rate during a walking phase in response to the smart shoe system determining the patient is walking,

the location data is recorded at a first update rate during the sitting phase in response to the smart shoe system determining the patient is sitting, and

the location data is recorded at a second update rate during the walking phase in response to the smart shoe system determining the patient is walking;

storing the pressure data and the location data recorded during the sitting phase and the walking phase in the smart shoe system; and

transmitting, to a medical provider and over an electronic network, the activity information.

6. The method of claim **5**, wherein the first sample rate and the second sample rate are within a range between 0.5 Hertz and 15 Hertz, the first sample rate being less than the second sample rate.

7. The method of claim **5**, wherein the transmitting the activity information includes transmitting, via a radio frequency transceiver, the activity information wirelessly between the smart shoe system and other electronic networking components.

8. The method of claim **5**, wherein the smart shoe system comprises:

a shoe having the plurality of pressure sensors, the plurality of pressure sensors configured to detect pressure at a plurality of points in a sole of the shoe;

a microprocessor coupled to the plurality of pressure sensors;

a Global Positioning System ("GPS") integrated circuit for correlating position of the smart shoe system to activity data generated by the plurality of pressure sensors; and

a flash memory storage for storing data generated by the microprocessor and the plurality of pressure sensors.

9. The method of claim **8**, wherein the smart shoe system further comprises a battery coupled to the microprocessor, the GPS integrated circuit, and the plurality of pressure sensors.

10. A smart shoe having a sole, the smart shoe comprising:

a plurality of pressure sensors, each pressure sensor in the plurality of pressure sensors configured to detect pressure at a plurality of points in the sole of the smart shoe;

a microprocessor coupled to the plurality of pressure sensors;

a Global Positioning System ("GPS") integrated circuit for correlating position of the smart shoe to activity data generated by the plurality of pressure sensors; and

a flash memory storage for storing data generated by the microprocessor and the plurality of pressure sensors, the microprocessor configured to execute an adaptive algorithm comprising:

initializing the adaptive algorithm;